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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 17

Application Number: 09/642,868
Filing Date: November 01, 2000
Appellant(s): JAMES, LADDIE L.

MAILED

JAN 13 2004

GROUP 3700

Bennett Ford, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 06, 2003.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

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3,425,407	Furman	2-1969
5,522,543	Herzog	6-1996
5,957,621	Clark, Jr. et al.	9-1999

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

- Claims 1-4, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Herzog. This rejection is set forth in prior Office Action, Paper No. 14.
- Claims 1-4, 7-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Furman and Haupt. This rejection is set forth in prior Office Action, Paper No. 14.
- Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog or Kirchner/Herzog or Herzog/Furman/Haupt, and further in view of Clark, Jr. et al. This rejection is set forth in prior Office Action, Paper No. 14.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Herzog.

Herzog discloses a spraying device¹⁰ mountable on a truck 12 comprising:

an engine 24 having an exhaust pipe 26;
a storage tank 14 under pressure during operation;
a first line 60 for connecting the exhaust pipe 26 to the storage tank 14 and serving as a source of pressure;
a second line 71 for connecting the storage tank 14 to a nozzle 91; and
a pressure relief valve 43;
and operating pressures of up to 35 PSI (column 2, line 7).

Herzog discloses a pressurization system for pressurizing a liquid holding tank on a truck for spraying water onto road surfaces (column 1, lines 7-12).

However, MPEP 2114 states that apparatus claims must be structurally distinguishable from the prior art. The structures recited in claims 1-4, 13-16 are not structurally distinguishable from the Herzog structure. Instead claims 1-4, 13-16 differ from Herzog only in the function of the structure. While claims 1-4, 13-16 require spraying tack, Herzog is limited to spraying water, or at best liquid. Accordingly, claims 1-4, 13-16 are anticipated by Herzog. The absence of a disclosure in Herzog of the particular function of spraying tack material instead of water does not defeat the finding of anticipation. A new intended use of an old structure does not make a claim to the old structure patentable. Moreover, the structure disclosed in Herzog is inherently capable of dispensing liquids other than water such as, for example tack material.

Furthermore, MPEP 2115 states that the material or the article worked upon does not limit apparatus claims. The structures recited in claims 1-4, 13-16 only differ from Herzog in its recitation of the material worked upon by the apparatus. Accordingly, the Herzog structures show all the elements claimed. The particular material worked on by the

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apparatus will not impart patentability to the claims, and that the manner in which the machine is used is not germane to the issue of the patentability of the machine itself.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Furman and Haupt.

Herzog discloses a spraying device¹⁰ mountable on a truck ¹² comprising:

an engine ²⁴ having an exhaust pipe ²⁶;

a storage tank ¹⁴ under pressure during operation;

a first line ⁶⁰ for connecting the exhaust pipe ²⁶ to the storage tank ¹⁴ and serving as a source of pressure;

a second line ⁷¹ for connecting the storage tank ¹⁴ to a nozzle ⁹¹; and

a pressure relief valve ⁴³;

and operating pressures of up to 35 PSI.

However, Herzog discloses a pressurization system for pressurizing a liquid holding tank on a truck for spraying water onto road surfaces (column 1, lines 7-12), but fails to disclose a tack material for spraying. Furman discloses a spraying apparatus having a liquid storage tank ⁶, an internal combustion engine ¹² with an exhaust manifold ⁷ and an

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exhaust pipe 16, which connects to the storage tank via pipe 15 to pressurize any types of liquids within the tank 6 (column 2, lines 3-10). Haupt discloses a tack spraying apparatus with a storage tank 1 and pump 38 to force the asphalt from within the tank 1.

Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Herzog with any type of material to be dispensed as suggested by Furman (using exhaust gas to pressurize a liquid within a storage tank) and to use the system for spraying tack material especially as taught by Haupt (pressurized an asphalt tank to force the asphalt to spray bars 23 a and 23b to spray a road surface). Doing so would provide a way to pressurize a liquid within a tank (Furman's column 2, lines 11-14) and forcing the liquid to the spray bars (Haupt's column 3, lines 25-27).

5. Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog or Herzog/Furman/Haupt as applied to claims 1-4, 12-16 above, and further in view of Clark, Jr. et al.

Herzog or Herzog/Furman/Haupt teaches all the limitations of the claims except for spraying rate of at least .02 gallons per square yard. However, Clark discloses a broad range spraying rate for an asphalt-spraying device is of 0.15-0.38 gallons per square yard. Therefore, it would have been obvious to one having ordinary skill in the art to configure the device of Herzog or Kirchner/Herzog or Herzog/Furman/Haupt with a spraying rate of at least .02 gallons per square yard as suggested by Clark. Doing so would provide a way to optimize the spraying range for the system (column 1, lines 36-46).

With respect to claims 6 and 18, the spraying rate of .02-.08 gallons per square yard is an obvious matter of design choice to a person of ordinary skill in the art, since the spray

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rate is depended on the system pressure, the nozzle opening, and traveling speed of the tanker truck.

6. Claims 7-11 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog/Furman/Haupt as applied to claims 1-4, 12-16 above.

Herzog or Herzog/Furman/Haupt teaches all the limitations of the claims except for functional values such as nominal orifice diameter, spray rate and spray pressure . However, these values are related to the operation of the system, in order to maintain an optimal operating condition for the system, the opening of the orifice required an optimal value of the system pressure, and a spray rate could also depend upon the nominal diameter of the orifices on a spray bar and the viscosity of the material. In the absence of the unexpected results obtained from the claim values, it seems that these values fall within the range of a tack-spraying device. Therefore, the functional values depend upon the desired results to be obtained, thus it would have been an obvious matter of design choice to a person of ordinary skill in the art.

With respect to claim 9, with the unexpected result that any polymer ball may develop within the tank, one skilled in the art should be able to provide the spraying system with the optimal values for the orifice diameter, and control the amount of heat absorbed by the material to maintain the desired viscosity and the optimal pressure to the system in order to minimize any build up of polymer.

(11) Response to Argument

Appellant's arguments filed October 06, 2003 have been fully considered but they are not persuasive.

1. The appellant argues on the 35 U.S.C. 102(b) rejections that the Herzog's device is for applying water that is less viscous than the appellant invention. The tack-spraying material of the appellant has a higher viscosity than water and operating at a pre-determined pressure level of about 4psig (claim 2) or 14 psig (claim 4). The Herzog's device for applying water at an operating pressure of up to 35 PSI (column 2, lines 4-9), thus Herzog's device is operating at a higher pressure than the highly viscous tack-spraying material of the appellant. Therefore, the Herzog's device is capable of spraying tack material that has higher viscosity than water, since the appellant only pressurized the system to 4 psig or 14 psig, which is much lower than the 35 PSI of the Herzog's device. The higher the pressure within the system, the stronger the force for pushing the liquid through the piping system.

The operating temperature of the appellant's device should be at the same level as the Herzog's device, since they are both operating from the same heat source of the exhaust gas of the device's engine that pressurizing the storage tank. Therefore, with the same operating temperature, the Herzog's device operating at a higher pressure than the appellant's device is at least capable of carrying out the task of spraying the tack material of the appellant.

In the absence of any claimed structures, which would cause appellant's desire to perform differently from the spraying system of Herzog, the rejection of claims 1-4, 12-16 under 35 U.S.C. 102(b) is still deem to be proper.

2. The appellant argues on the 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Furman and Haupt. Herzog discloses a pressurization system for pressurizing a liquid holding tank on a truck for spraying water onto road surfaces (column 1, lines 7-12),

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but fails to disclose a tack material for spraying. Furman discloses a spraying apparatus having a liquid storage tank 6, an internal combustion engine 12 with an exhaust manifold 7 and an exhaust pipe 16. the exhaust pipe 16 connecting to the storage tank via pipe 15 and a T-piece 14 to pressurize the liquid within the tank 6, thus the Furman device utilizing exhaust gas from the device's engine to pressure the liquid within the storage tank . Haupt discloses a tack spraying apparatus with a storage tank 1 and a rotary pump 38 to pressurize the asphalt within the tank 1. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Herzog with a tack material for spraying as suggested by Haupt (pressurized an asphalt tank to force the asphalt to spray bars 23 a and 23b to spray a road surface) and Furman (using exhaust gas to pressurize a liquid within a storage tank). Doing so would provide a way to spray tack material by using the spray bars onto road surfaces (Haupt's page 3, column 6, lines 25-27) and pressurizing any type liquids within a tank (Furman's column 2, lines 11-14).

With respect to arguments of claims 7-11 and 19-21. In the absence of the unexpected results obtained from the claimed values, it seems that these values fall within the range of a tack-spraying device. Therefore, the functional values depend upon the desired results to be obtained, thus it would have been an obvious matter of design choice to a person of ordinary skill in the art.

3. rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog or Herzog/Furman/Haupt and further in view of Clark, Jr. et al. The Herzog's device operating at a higher-pressure level (35 PSI) than the appellant's device (4psig or 14 psig), and the appellant's dispensing rates of 0.02 to 0.08 gallons per square yard are much less than the rates 0.25 to 0.65 (see Clark column 4, line 61). Therefore, the Herzog's device is capable


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of sustaining the Clark's dispensing rate, and it is obvious to combine a higher pressurized system with a higher dispensing rate device.

4. In view of appellant's argues on the 35 U.S.C. 103(a) as being unpatentable over Kirchner et al. in view of Herzog is hereby withdrawn by the examiner.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


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dqn

January 12, 2004

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